

इंटरनेट

मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

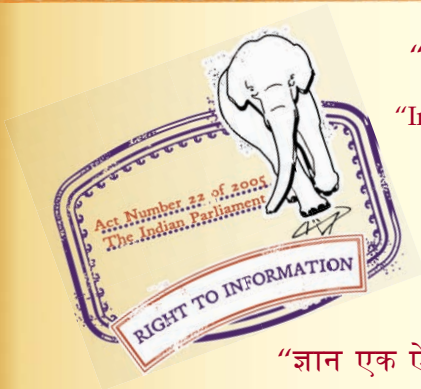
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8016 (1996): Hand Trolley for Gas Cylinders (Oxygen and Dissolved Acetylene) for Industrial Use [MED 7: Material Handling Systems and Equipment]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक
औद्योगिक उपयोगों के लिये गैस सिलिन्दरों
(आक्सीजन और घुलित एसीटिलीन) की हाथ ट्राली —
विशिष्ट

(पहला पुनरीक्षण)

Indian Standard

HAND TROLLEY FOR GAS CYLINDERS
(OXYGEN AND DISSOLVED ACETYLENE)
FOR INDUSTRIAL USE — SPECIFICATION

(*First Revision*)

ICS 53.060 ; 23.020.30

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Non-powered Materials Handling Equipment Sectional Committee had been approved by the Heavy Mechanical Engineering Division Council.

This Indian Standard was first published in 1976. This revision of the standard has been brought out to align the requirements of the standard with the latest practices being followed in the country.

Special trolleys are required for transporting oxygen and acetylene cylinders within the premises of the factory when the object on which the work is to be carried out can not be moved easily. These are of robust but light constructions intended to give satisfactory service over a long period. This standard covers only the trolleys intended for use inside a factory and is not applicable for transporting the cylinders over a long distance or over public roads.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

HAND TROLLEY FOR GAS CYLINDERS (OXYGEN AND DISSOLVED ACETYLENE) FOR INDUSTRIAL USE — SPECIFICATION

(*First Revision*)

1 SCOPE

This Indian Standard covers principal dimensions and requirements for hand trolley intended for indoor movement of oxygen and acetylene gas cylinders and is not applicable over a long distance and public roads.

2 REFERENCES

The Indian Standards listed below are necessary adjuncts to this standard.

<i>IS No.</i>	<i>Title</i>
5 : 1978	Colours for ready mixed paints and enamels (<i>third revision</i>)
1239 (Part 1) : 1990	Mild steel tubes, tubulars and other wrought steel fittings: Part 1 Mild steel tubes (<i>fifth revision</i>)
2062 : 1992	Steel for general structural purposes—Specification (<i>fourth revision</i>)
2074 : 1992	Ready mixed paint, air drying, red oxide-zinc chrome, priming (<i>second revision</i>)
2932 : 1994	Enamel, synthetic, exterior (a) under-coating, (b) finishing (<i>second revision</i>)
7369 : 1983	Specification for wheels and castors (<i>first revision</i>)

3 DESIGN

3.1 A typical design of the trolley for carrying cylinders (oxygen and dissolved acetylene) is given in Fig. 1 for guidance only.

3.2 The trolley shall be capable of accommodating together one oxygen cylinder and one acetylene cylinder, both completely filled.

3.3 The trolley shall be stable when stationary with the cylinders in vertical position.

4 CONSTRUCTION

4.1 Frame

The frame shall be made out of tubular sections conforming to IS 1239 (Part 1) : 1990, provided with suitable platform to accommodate two cylinders of oxygen and acetylene.

4.2 Axle

4.2.1 The axle shall be so positioned that it would be possible to balance the trolley while moving it and when the trolley is left stationary in vertical position the wheels should not touch the ground.

4.2.2 The axle shall be made from round bars conforming to IS 2062 : 1992.

4.3 Handle

The handle shall be made of tubular sections conforming to IS 1239 (Part 1) : 1990.

4.4 Securing Chains

The trolley shall be provided with two chains suitable for fastening two cylinders independently when the trolley is left stationary in vertical position or in moving position.

4.5 Tool Box

If required by the purchaser, the tool box may be provided for carrying normal accessories like welding torch, gas hose and gas welding / cutting tools. Dimensions and design of the tool box shall be as agreed to between the purchaser and the manufacturer.

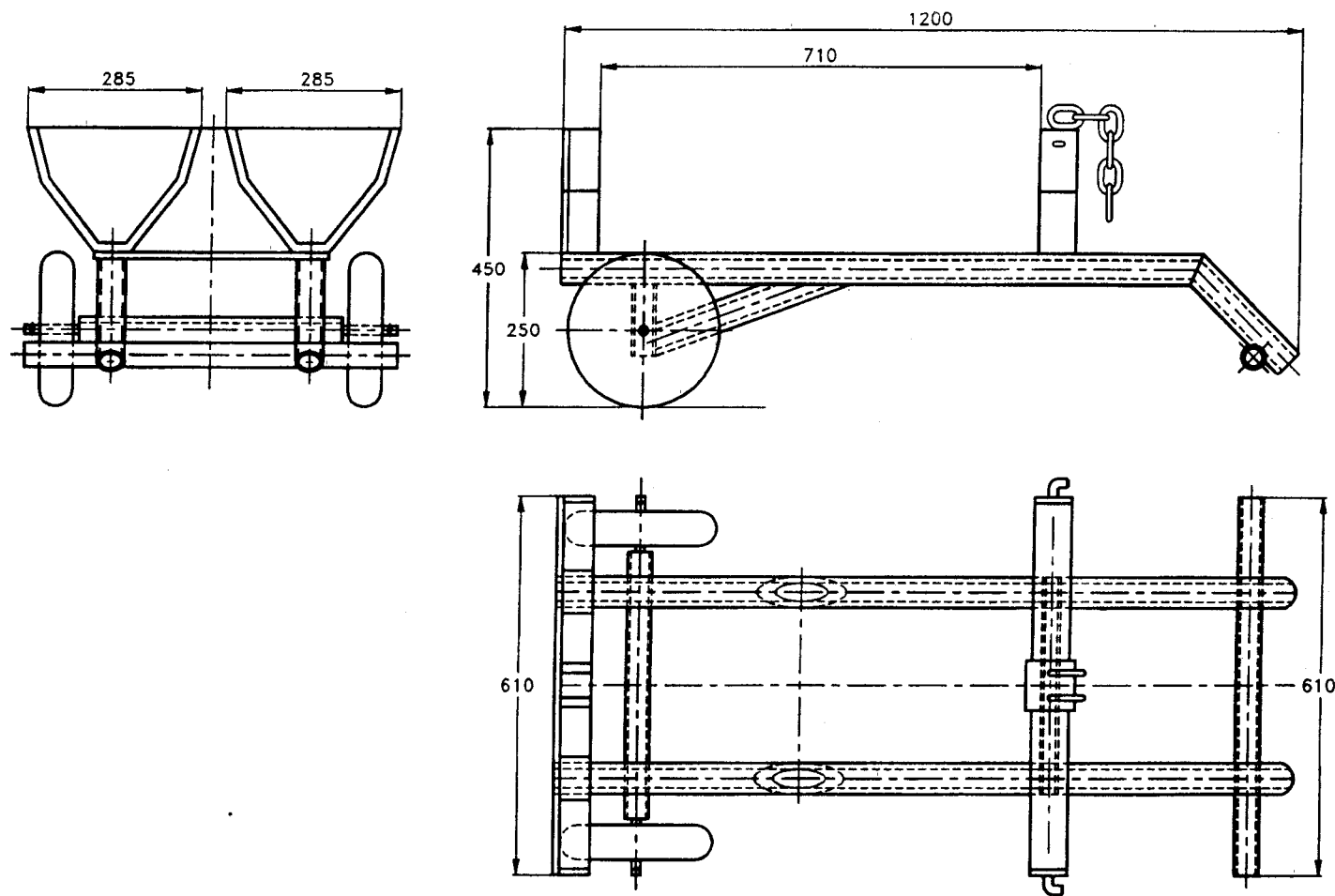
5 DIMENSIONS AND TOLERANCES

5.1 The overall dimensions of a 2 kN trolley are given in Fig. 1 for guidance only.

5.2 Tolerances on all overall dimensions of the trolley shall be ± 5 mm.

6 LOAD CARRYING CAPACITY

The trolley shall be capable of carrying 2 kN load.



All dimensions in millimetres.

FIG. 1 HAND TROLLEY FOR GAS CYLINDER (OXYGEN AND DISSOLVED ACETYLENE)

7 WHEELS

The wheels used in the trolley shall conform to IS 7369 : 1983 rubber tyred with suitable bearing arrangement, as agreed to between the purchaser and the manufacturer.

8 WORKMANSHIP AND FINISH

8.1 The trolley shall be free from warp in structural frame work.

8.2 Each trolley shall be free of rust, millscale, dirt, oil, etc, and thoroughly cleaned, if needed with chemical solution and rinsed. Subsequently each trolley shall be given one coat of red oxide primer (see IS 2074 : 1992) and then two coats of synthetic enamel paint (see IS 2932 : 1994) in colour / shade as agreed (see IS 5 : 1978).

8.3 The painted surface shall be free from wrinkles, irregular painting, dripping, scratches, irregularities in colouring.

9 PERFORMANCE

9.1 When the trolley is traversed over a smooth road loaded with 120 percent of permissible carrying load, the wheels shall turn smoothly and satisfactorily.

9.2 The trolley shall remain stable when stationary with the cylinders in vertical position.

9.3 The push handle shall withstand a minimum horizontal force equal to 230 N plus 2 percent rated capacity without breaking or permanently bending.

10 MARKING

10.1 The trolley shall be marked with the following information in a visible position:

- a) Indication of the source of manufacture;
- b) Load carrying capacity, in kN;
- c) Manufacturer's serial number; and
- d) Year of manufacture.

10.2 BIS Certification Marking

The trolley may also be marked with the Standard Mark.

10.2.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

Bureau of Indian Standards

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Amendments Issued Since Publication

Amend. No.	Date of Issue	Text Affected

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